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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,992	04/08/2004	Michael A. Keith	4735	9045

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LOS ANGELES, CA 90012

EXAMINER

PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/820,992

Applicant(s)

KEITH ET AL.

Examiner

David J. Parsley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **Detailed Action**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-25-06 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4/1, 5/1, 6/1, 7/1, 8/1, 9/1, 10/1 and 11/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,898,125 to Mangolds et al. in view of U.S. Patent No. 5,450,795 to Adelman.

Referring to claim 1, Mangolds et al. discloses a less lethal projectile—at 15, adapted to be loaded into a cartridge case—at 12, to form a loaded cartridge—see figures 1 and 4, the less lethal projectile comprising a hollow body container—at 15, having a closed front end and an open rear

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end—see at 15 in figure 4, filled with a high-density filler—at 18-32, a closure—at 26,36,38,54,71,74, located in the open rear end of the hollow body container to seal the filler in the container—see figure 4. Mangolds et al. does not disclose a bore rider stabilizer attached to the rear of the closure, the bore rider stabilizer comprising a fabric or film having a low coefficient of friction. Adelman does disclose a bore rider stabilizer—at 25, attached to the rear of the closure—see for example figure 5, the bore-rider stabilizer comprising a fabric or film having a low coefficient of friction—see for example column 3 lines 46-66. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Mangolds et al. and add the bore rider stabilizer of Adelman, so as to allow for increased aerodynamic efficiency and reduction of muzzle velocity of the device.

Referring to claim 4/1, Mangolds et al. as modified by Adelman further discloses the body of the container is made of a woven fabric, plastic or rubber—see for example column 3 lines 6-20 of Adelman.

Referring to claim 5/1, Mangolds et al. as modified by Adelman further discloses the high density filler—at 20, comprises steel, lead or ceramic shot, silica beads, metal beads, metal powder or mixtures thereof—see for example column 3 lines 21-45 of Adelman.

Referring to claim 6/1, Mangolds et al. as modified by Adelman further discloses the high-density filler is contained within a frangible pouch or capsule or formed into a pellet—see for example figure 5 and column 3 lines 7-45 of Adelman.

Referring to claim 7/1 Mangolds et al. as modified by Adelman further discloses the closure—at 38, comprises a round, drum shaped body—see figure 4, having a hole in the center—

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see figure 4 and a circumferential groove—see at the ends of 38, and an o-ring—at 26,36, fitted into the circumferential groove—see figure 4 of Mangolds et al.

Referring to claim 8/1, Mangolds et al. as modified by Adelman further discloses the bore rider stabilizer—at 25, comprises a plurality of tail lobes—at 25—see for example figure 5 of Adelman.

Referring to claim 9/1, Mangolds et al. as modified by Adelman further discloses the bore rider stabilizer is a single layer of material made of high density polyethylene, ultra high molecular weight polyethylene, polytetrafluorethylene coated glass cloth or 3-5 mil polyester—see for example column 3 lines 46-66 of Adelman.

Referring to claim 10/1 Mangolds et al. as modified by Adelman further discloses two layers—at 34 and 76, a first fabric layer—at 34 and a second layer—at 76, having a low coefficient of friction—see for example column 5 lines 17-55 of Mangolds et al.

Claim 11/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangolds et al. as modified by Adelman as applied to claim 1 above. Mangolds et al. as modified by Adelman further discloses a first fabric layer—at 25, made of a high density polyethylene or ultra high molecular weight polyethylene—see for example column 3 lines 46-66 of Adelman. Mangolds et al. as modified by Adelman further discloses two layers—at 34 and 76, a first fabric layer—at 34 and a second layer—at 76, having a low coefficient of friction—see for example column 5 lines 17-55 of Mangolds et al. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Adelman and add the two layers of Mangolds et al., so as to allow for the device to be protected from outside elements. Mangolds et al. as modified by Adelman does not disclose the second layer is made of a polyester film or cellulose acetate. However, this

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limitation is a characteristic found through experimentation and therefore it would have been obvious to one of ordinary skill in the art to take the device of Mangolds et al. as modified by Adelman and add the second layer made of a polyester film or cellulose acetate, so as to allow for the device to be protected from outside elements.

Claim 12/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangolds et al. as modified by Adelman as applied to claim 1 above, and further in view of Brunn et al. Mangolds et al. as modified by Adelman does not disclose a fabric container having a loose weave, which allows radial expansion upon impact. Brunn et al. does disclose fabric container—at 32, having a loose weave, which allows radial expansion upon impact—see for example column 2 lines 49-60. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Mangolds et al. as modified by Adelman and add the fabric container of Brunn et al., so as to allow for the device to be made non-lethal.

Claims 2, 3, 4/2, 4/3, 5/2, 5/3, 6/2, 6/3, 7/2, 7/3, 8/2, 8/3, 9/2, 9/3, 12/2 and 12/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,202,562 to Brunn et al. in view of Adelman and in view of U.S. Patent No. 2,373,363 to Wellcome.

Referring to claim 2, Brunn et al. discloses a less lethal projectile adapted to be loaded into a cartridge case—at 50, to form a loaded cartridge, comprising a fabric body container—at 32,46,48, having a closed front end and an open rear end—see for example figure 2, filled with a high-density filler—at 42. Brunn et al. does not disclose a spool having a hole through it through which is passed the rear end of the fabric body and an adhesive to seal the rear of the fabric in the hole of the spool, a sealer wrapped round the spool closure and a binder attached into the bore hole of the spool. Wellcome does disclose a spool—see at 9 and proximate 9 in figure 1,

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having a hole through it through which is passed the rear end of the fabric body—at 7—see figure 1, a sealer—at 7b or 9k, wrapped around the spool closure—see figure 1, and a binder—at 9f, 12-12b, to attach the rear of the fabric in the hole of the spool—see figure 1. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. and add the spool of Wellcome, so as to allow for the flight and deployment of the device to be controlled during use. Brunn et al. further does not disclose a bore rider stabilizer which is not part of the container attached to the rear of the closure, the bore rider stabilizer comprising a fabric or film having a low coefficient of friction. Adelman does disclose a bore-rider stabilizer—at 25, which is not part of the container—at 15, attached to the rear of the closure—see figure 5, the bore rider stabilizer comprising a fabric or film having a surface with a low coefficient of friction—see for example column 3 lines 46-66. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. and add the bore stabilizer of Adelman, so as to allow for the impact force of the projectile to be transferred over an increased area.

Referring to claim 3, Brunn et al. discloses a less lethal projectile adapted to be loaded into a cartridge case—at 50, to form a loaded cartridge, comprising a fabric body container—at 32,46,48, having a closed front end and an open rear end—see for example figure 2, filled with a high-density filler—at 42. Brunn et al. does not disclose a spool having a hole through it through which is passed the rear end of the fabric body and an adhesive to seal the rear of the fabric in the hole of the spool. Wellcome does disclose a spool—see at 9 and proximate 9 in figure 1, having a hole through it through which is passed the rear end of the fabric body—at 7—see figure 1, and an adhesive—at 9f, 12-12b, to seal the rear of the fabric in the hole of the spool—see figure 1. Therefore it would have been obvious to one of ordinary skill in the art to take the device of

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Brunn et al. and add the spool of Wellcome, so as to allow for the flight and deployment of the device to be controlled during use. Brunn et al. further does not disclose a bore rider stabilizer attached to the rear of the closure, the bore rider stabilizer comprising a fabric or film having a low coefficient of friction. Adelman does disclose a bore-rider stabilizer—at 25, attached to the rear of the closure—see figure 5, the bore rider stabilizer comprising a fabric or film having a surface with a low coefficient of friction—see for example column 3 lines 46-66. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. and add the bore stabilizer of Adelman, so as to allow for the impact force of the projectile to be transferred over an increased area.

Referring to claims 4/2 and 4/3, Brunn et al. as modified by Adelman and Wellcome further discloses the body of the container—at 32 of Brunn et al. or—at 10,15,26,30 of Adelman, is made of a woven fabric, plastic or rubber—see for example column 2 lines 49-60 of Brunn et al. and column 3 lines 6-20 of Adelman.

Referring to claims 5/2 and 5/3, Brunn et al. as modified by Adelman and Wellcome further discloses the high density filler comprises steel, lead or ceramic shot, silica beads, metal beads, metal powder or mixtures thereof—see at 42 and column 2 lines 48-60 of Brunn et al. and at—20 and column 3 lines 21-45.

Referring to claims 6/2 and 6/3, Brunn et al. as modified by Adelman and Wellcome further discloses the high density filler is contained within a frangible pouch or capsule or formed into a pellet—see for example at 32 of Brunn et al. and—see for example figure 5 and column 3 lines 7-45 of Adelman.

Referring to claims 7/2 and 7/3 Brunn et al. as modified by Adelman and Wellcome further discloses the closure—at 9, comprises a round, drum shaped body—see figure 1 of Wellcome, having a hole in the center—see figure 1 and a circumferential groove—see at the walls of 9, and an o-ring—at 9k or 9s, fitted into the circumferential groove—see figure 1 of Wellcome.

Referring to claims 8/2 and 8/3, Brunn et al. as modified by Adelman and Wellcome further discloses the bore rider stabilizer—at 25 of Adelman comprises a plurality of tail lobes—see for example figure 5 of Adelman.

Referring to claims 9/2 and 9/3, Brunn et al. as modified by Adelman and Wellcome further discloses the bore rider stabilizer is a single layer of material made of high density polyethylene, ultra high molecular weight polyethylene, polytetrafluorethylene coated glass cloth or 3-5 mil polyester—see for example column 3 lines 46-66 of Adelman.

Referring to claims 12/2 and 12/3, Brunn et al. as modified by Adelman and Wellcome further discloses a fabric container—at 32, having a loose weave, which allows radial expansion upon impact—see for example column 2 lines 49-60 of Brunn et al.

Claims 10/2 and 10/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunn et al. as modified by Adelman and Wellcome as applied to claims 2 or 3 above, and further in view of Mangolds et al. Brunn et al. as modified by Adelman and Wellcome further discloses a first fabric layer—at 25 of Adelman. Brunn et al. as modified by Adelman and Wellcome does not disclose the bore-rider stabilizer comprises two layers, a first fabric layer and a second layer having a low coefficient of friction. Mangolds et al. does disclose two layers—at 34 and 76, a first fabric layer—at 34 and a second layer—at 76, having a low coefficient of friction—

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see for example column 5 lines 17-55. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. as modified by Adelman and Wellcome and add the two layers of Mangolds et al., so as to allow for the device to be protected from outside elements.

Claims 11/2 and 11/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunn et al. as modified by Adelman and Wellcome as applied to claims 2 or 3 above, and further in view of Mangolds et al. Brunn et al. as modified by Adelman and Wellcome further discloses a first fabric layer—at 25, made of a high density polyethylene or ultra high molecular weight polyethylene—see for example column 3 lines 46-66 of Adelman. Brunn et al. as modified by Adelman and Wellcome does not disclose the bore-rider stabilizer comprises two layers, a first fabric layer and a second layer having a low coefficient of friction. Mangolds et al. does disclose two layers—at 34 and 76, a first fabric layer—at 34 and a second layer—at 76, having a low coefficient of friction—see for example column 5 lines 17-55. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. as modified by Adelman and Wellcome and add the two layers of Mangolds et al., so as to allow for the device to be protected from outside elements. Brunn et al. as modified by Adelman, Wellcome and Mangolds et al. does not disclose the second layer is made of a polyester film or cellulose acetate. However, this limitation is a characteristic found through experimentation and therefore it would have been obvious to one of ordinary skill in the art to take the device of Brunn et al. as modified by Adelman, Wellcome and Mangolds et al. and add the second layer made of a polyester film or cellulose acetate, so as to allow for the device to be protected from outside elements.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "D. Parsley", with a long, sweeping horizontal line extending to the right.

David Parsley  
Patent Examiner  
Art Unit 3643